FA49 Ph.D. Utilization

The Issue

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Are freshly-minted FA49 Ph.D.s being sent to initial utilization tours where their newly acquired skills are put to best use for the Ar

The Short Answer

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- For the set of personnel considered, most of the assignments were a reasonable fit.
- Potential exists to manage Advanced Civil Schooling (ACS) students to get a better fit in their utilization tours.

Background Information

- From 1999 – 2003, 37 FA49 officers completed or were programmed to receive Ph.D.s through advanced civil schooling. Of those, 35 were funded by the Army.
- 17 of the 35 went to an initial utilization tour at USMA – 5 in Systems Engineering, 10 in Math, and 2 in Social Science (Economics).
- 18 officers were in play for assignment to the other agencies that are authorized FA49s.

1999 Cohort

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Dissertation title – initial utilization tour

- **"Adaptive Inventory Control for Non-Stationary Demand with Partial Information" – TRAC-Leavenworth**
- **"Flexibility Planning: A General Framework and Application for Investment Under Uncertainty" - CAA**

2000 Cohort

Dissertation title – initial utilization tour

- **"Disaggregation and Data Consistency in Distributed Interactive Simulation" – TRAC-Leavenworth**

2001 Cohort

Dissertation title – initial utilization tour

- "Revisiting Winter's Method of Forecasting" – G-8/PAED
- "Knowledge-Based Bayesian Networks for Discriminant Analysis" – NPS
- "Estimating the Probability of Landmine Contamination in a Non-Combatant Environment" – TRAC-Leavenworth
- "Simulating M/1/Pareto Queues" - CAA

2002 Cohort

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Dissertation title – initial utilization tour

- **"Autonomous Solution Methods for Large Scale Markov Chains" – TRAC-WSMR**
- **"Efficient Nearly Orthogonal and Space-Filling Experimental Designs for High-Dimension Complex Models" – TRAC-Monterey**
- **"Motorcycle Rider Posture Prediction: The Prediction of Spinal Curvature as a Function of Anthropometrics and Point-of-Contact Chassis Design" – G-8/PAED**

2002 Cohort (continued)

Dissertation title – initial utilization tour

- **"A Group Theoretic Tabu Search Methodology for Solving Theater Distribution Vehicle Routing and Scheduling Problems" – G-8/PAED**
- **"A Systems Approach to Optimize a Multi-Echelon Repairable Item Inventory System with Multiple Classes of Service" – CAA**
- **"Air Traffic Control Resource Management Strategies and the Small Aircraft Transportation System: A System Dynamics Perspective" – Objective Force Task Force**
- **"A Continuous Early Validation Method for Improving the Development Process" – G-8/FD**

2003 Cohort

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Dissertation title – initial utilization tour

- **“Analysis of Large Data Sets with Linear and Logistic Regression” – CAA**
- **“Investigating the Use of Tabu Search to Find Near-Optimal Solutions in Multi-Classifier Systems” – US Army Accessions Command**
- **“Optimizing Federal Natural Gas Royalties in the Gulf of Mexico” – CAA**
- **“An Adaptive Tabu Search Approach to Cutting and Packing Problems” - OTC**

And the Point is…

- **For this set, assignments made sense (sort of)**
- **Probably need to monitor utilization tours –identify follow-on assignment upon ACS selection; work with individual while in school to exploit course work/research/dissertation effort**
- **“Best” utilization tour leverages on individual’s military and academic skill set**